

## **DATA STRUCTURES FOR EFFICIENT PROCESSING OF IP FRAGMENTATION AND REASSEMBLY**

### **ABSTRACT OF THE DISCLOSURE**

Data structures, a method, and an associated transmission system for  
5 IP fragmentation and IP reassembly on network processors in order to  
minimize memory allocation requirements. Frame data for IP fragmentation  
or reassembly on a network processor is read into buffers to which are  
associated various control structures. The control structures permit IP  
10 fragmentation or reassembly to be accomplished without creating multiple  
copies of the frame or fragments.